

ABSTRACT

A data network including at least one crossbar, wherein each crossbar comprises N ports and a plurality N of devices each associated with and connected to one port of one of ^{the} said crossbars. Each one port of one crossbar includes an input buffer, a plurality N-1 of port output buffers, a plurality N-1 of fullness sensors, ^{devices} shutoff means. The input buffer receives messages from the device connected to its port and sends ^{the} said messages to the other ports of ^{the} said one crossbar. Each port output buffers corresponds to one of ^{the} said other ports, wherein each port output buffer receives ^{the} said messages only from ^{the} said input buffer of its associated other port. Each fullness sensor is associated with one port output buffer and measures the fullness state of its associated port output buffer.

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